

FLORA AND FAUNA

The native plants and animals of Pender County are characteristic of the Atlantic Coastal Plain, a biological and geological province that stretches from southeastern Massachusetts to Florida. Pender County is located on a geological feature known as the Cape Fear Arch, which stretches from Cape Lookout in North Carolina to Cape Romaine in South Carolina. The Cape Fear Arch region has a higher plant and animal diversity than any other area along the Atlantic Coast north of Florida. The county contains an exceptionally diverse flora and fauna due to the number and quality of natural communities present, and to the naturally high species richness of some of these communities. Because of this habitat diversity and species richness, there are a large number of rare plants and animals that are native to the county. Among these are 83 plant species (Table 3) and 65 animal species (Table 4) that are recognized as rare at the Federal or State level. The rare plants comprise 81 flowering plants, one fern relative (a quillwort), and one moss. The rare animals comprise five mammals, seven birds, 11 reptiles, one amphibian, two fish, and 39 invertebrates.

Pender County contains highly significant populations for some of these rare plants and animals. Two plant species--rough-leaf loosestrife (*Lysimachia asperulifolia*) and Cooley's meadowrue (*Thalictrum cooleyi*)--are listed as Federally and State Endangered. Chaffseed (*Schwalbea americana*), also listed as Federally and State Endangered, is known historically from the county but has not been seen since 1953. Seabeach amaranth (*Amaranthus pumilus*) is listed as Federally and State Threatened, and golden sedge (*Carex lutea*) is State Endangered and Proposed Federally Endangered. Another 13 plants are recognized as Federal Species of Concern due to their global rareness. Pender County also contains significant percentages of the current global distribution of three plants associated with the Pine Savanna Very Wet Clay Variant: savanna onion (*Allium* sp. 1 - 50%), golden sedge (63%), and Cooley's meadowrue (43%). Both in terms of population number and population size, Pender County contains the most critical sites for all three of these species. The county also contains one of four currently known global populations for an undescribed goldenrod (*Solidago* sp. 1), and the only currently known populations in North Carolina for Long's bittercress (*Cardamine longii*), nutmeg hickory (*Carya myristiciformis*), shiny spanglegrass (*Chasmanthium nitidum*), sessile yellow stargrass (*Hypoxis sessilis*), limestone wild-petunia (*Ruellia strepens*), and water arrowhead (*S. stagnorum*). The county also contains a significant component of the global distribution of Venus flytrap (*Dionaea muscipula*), Carolina bogmint (*Macbridea caroliniana*), and Thorne's beaksedge (*Rhynchospora thornei*).

Among the rare animals documented from Pender County, three are listed as Federally and State Endangered: manatee (*Trichechus manatus*), red-cockaded woodpecker (*Picoides borealis*), and shortnose sturgeon (*Acipenser brevirostrum*). Four others are listed as Federally and State Threatened: piping plover (*Charadrius melodus*), American alligator (*Alligator mississippiensis*), loggerhead turtle (*Caretta caretta*), and green turtle (*Chelonia mydas*). Another 11 animals are recognized as Federal Species of Concern due to their global rareness. With the exception of the manatee, which is an occasional summer visitor to coastal rivers, all of these rare animals have intermittent to permanent breeding populations in the county. Particularly significant are populations of two invertebrates that are globally restricted to the Coastal Plain of North Carolina: a dart moth (*Agrotis* species 1 near *buchholzi*) and the Venus flytrap cutworm moth (*Hemipachnobia subporphyrea*). The North Carolina Coastal Plain populations of the rattlesnake-master borer moth